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ABSTRACT

In assessing coping techniques, the individual is the most important variable; no one technique will be successful for an individual in all situations. Also, stress-reduction techniques must be sensitive to individual differences, both culturally and situationally. Consequently, since no one technique will work for everyone, a stress-reduction program must assault the problem at many levels. A study sought to find specific coping techniques helpful to educators and cluster the techniques into interpretable categories. Data were collected from 1,156 questionnaires about stress answered by teachers. One hundred fifty-six techniques were identified and found to cluster into seven categories: social, physical, intellectual, entertainment, managerial, personal, and attitudinal. Effective coping appeared to consist of building a repertoire of techniques equally balanced in these categories. The study also assessed the number of coping responses used and the frequency with which 125 educators used them. Data were analyzed by respondent's sex, age, and position. This paper reports on study results, which are also presented in tables. (JD)

Educators' Response to Stress: Towards a Coping Taxonomy

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Educators' Responses to Stress: Towards a Coping Taxonomy

Background

In the twentieth century, Americans face more pressure, more aggression, more deadlines, more change, and more conflict than at any other time. Due to time-saving devices on the job and at home, such as dictaphones, intercoms, word processors, microwave ovens, rapid transit, fast-food establishments, and crash courses in dieting, exercising, and even one-minute management, educators try to cram more into their days than ever before--all to produce more in a day with less time and effort.

What has resulted is an occupation which is over worked, over fed, over stimulated, over protected, and under exercised, under rested, under disciplined, and under nourished. The result: a plugged-in, clipped-on, stir-and-serve setting where educators become less equipped to handle the conflict, change, and stress of their jobs.

In response to this twentieth-century age of anxiety, a proliferation of materials has been compiled in the name of stress: an estimated 100,000 books and articles, 1,000 research projects, and 6,000 additional publications catalogued every year in the name of stress. The word stress is one which educators and lay persons alike are familiar with. However, for all the name familiarity that exists, many have not had the time or sensitivity to cope with stress systematically.

The literature on coping is significant in volume and diverse in attention (Burke & Weir, 1980). Coping research addresses popular and academic concerns as well as conceptualized, theoretical, and empirical investigations. Researchers from the disciplines of medicine, political science, psychiatry, clinical psychology, behavioral science, and education have undertaken studies

to understand the phenomenon of stress, its consequences, and coping responses. However, no amount of research will ever produce the answer for coping. The foremost authority on stress, Hans Selye, pointed out that despite everything that has been written and said about stress and coping there is no ready-made formula that will suit everyone (Selye, 1975).

In assessing coping techniques, one must remember that the individual involved is the most important variable; that no one technique will be successful for an individual in all situations. Also, stress reduction techniques must be sensitive to individual differences, both culturally and situationally (Swent, 1983). Consequently, since no one technique will work for everyone, a stress-reduction program must assault the problem at many levels.

Problem

Since no one technique will suit everyone, how can educators positively respond to distressful situations? When faced with such a dilemma, scientists and researchers usually attempt to develop a technology to control it. Once enough information about a phenonemon is generated, the tendency is to transform it into a hard science so it can be controlled, exact in its prescription, and predictable.

However a prescriptive, scientific approach may not be an appropriate technology for coping. Blueprints for exact techniques are not available, nor should they be. For, as many have discovered, coping is an art, very individualistic and personalized. Possibly this is what makes life so creative and challenging. Coping should not be made a science. As one psychologist once lamented: "Take romance, for instance, if we knew exactly what to do, it wouldn't be romance. . . but seduction."

Some researchers have attempted to prescribe effective and ineffective techniques. Burke (1971), for example, found that talking with your peers was

effective, but talking with your spouse was not, until 55 years of age! Others approach coping with singular trend techniques such as relaxation response (Benson, 1975), aerobics (Cooper, 1977), biofeedback (Brown, 1977), or other such stress interventions. While no one disputes the benefits of each of these individually, when stress attacks at 10:07 a.m., will the stress-laden educator be able to jog or meditate?

No one technique exists which controls, manages, or reduces stress for all people in all situations since stressors involve many people with diverse backgrounds and different aspects of life and job requirements. The solution seems to rest in a need for a holistic intervention to assault problems on many levels-- in other words, to develop a comprehensive set of coping strategies.

Numerous coping strategies have been theorized by stress researchers. Lazarus (1966) conceptualized two ways of coping: (1) to direct one's efforts at dealing with the sources of stress, and (2) to address the subjective experience of stress (palliative techniques). Lazarus contended that most individuals attempt direct-action techniques first and, if not successful or practical, rely on palliative techniques. Adams (1981) suggested a three-level approach to stress management: (1) removing or avoiding unnecessary stressors; (2) coping effectively with necessary stressors; and (3) building health to buffer long-term effects of stress. Another example of coping strategy posited by Gmelch (1982) suggests segmenting stressors into two categories: (1) those internally controlled and (2) those externally controlled. Those within the individual's control should be managed at the cause level by self-management techniques. Those beyond one's control should be attacked at the symptom level with stress absorbers such as relaxation, nutrition, exercise, coping attitudes, and so on. Similarly, Pines, Elliot, and Kafry (1981)

proposed developing cognitive clarity between two categories of stressors--those under the individual's control that can be modified, and those inherent in work that must be accepted.

Study Propositions and Objectives

From the previous discussion, the following propositions on coping are asserted as a basis, and bias, of this research report:

(1) The individual is the most important variable such that no one coping technique is effective for all individuals in all situations.

(2) Individuals can't change the world around them, but they can change how they relate to it.

(3) Coping techniques must be sensitive to cultural, social, psychological, and environmental differences in individuals.

(4) Individuals who cope best develop a repertoire of techniques to counteract different stressors in different situations.

(5) An individual's repetoire of techniques should represent a holistic approach toward coping such that it includes known effective strategies such as physical activity, occupational skills, social support, and so on.

Notwithstanding, what is the nature of coping? Are there identifiable categories of coping which, if used holistically, can help individuals systematically address the stresses in education?

As with most research on coping, either a wide-ranging assemblage of fragmented coping techniques have been forwarded or categories of coping have been theorized but not tested. Neither approach reflects and accounts for the multidimensionality nor the unique individualistic characteristics of coping. This study is advanced as a means of overcoming some of these shortcomings by first recognizing the individual differences in coping styles and tapping

personal testimonials rather than theoretical constructs for effective coping categories. To meet these purposes, the objectives of this study were:

(1) To identify specific coping techniques found to be helpful to educators in handling the tensions and pressures of their jobs.

(2) To cluster these techniques into interpretable coping categories.

(3) To assess the number of responses or techniques within each category used to effectively cope with stress.

(4) To identify the frequency with which educators use these coping responses.

(5) To identify similarities or differences in coping responses and frequencies in terms of educators' gender, age, and position.

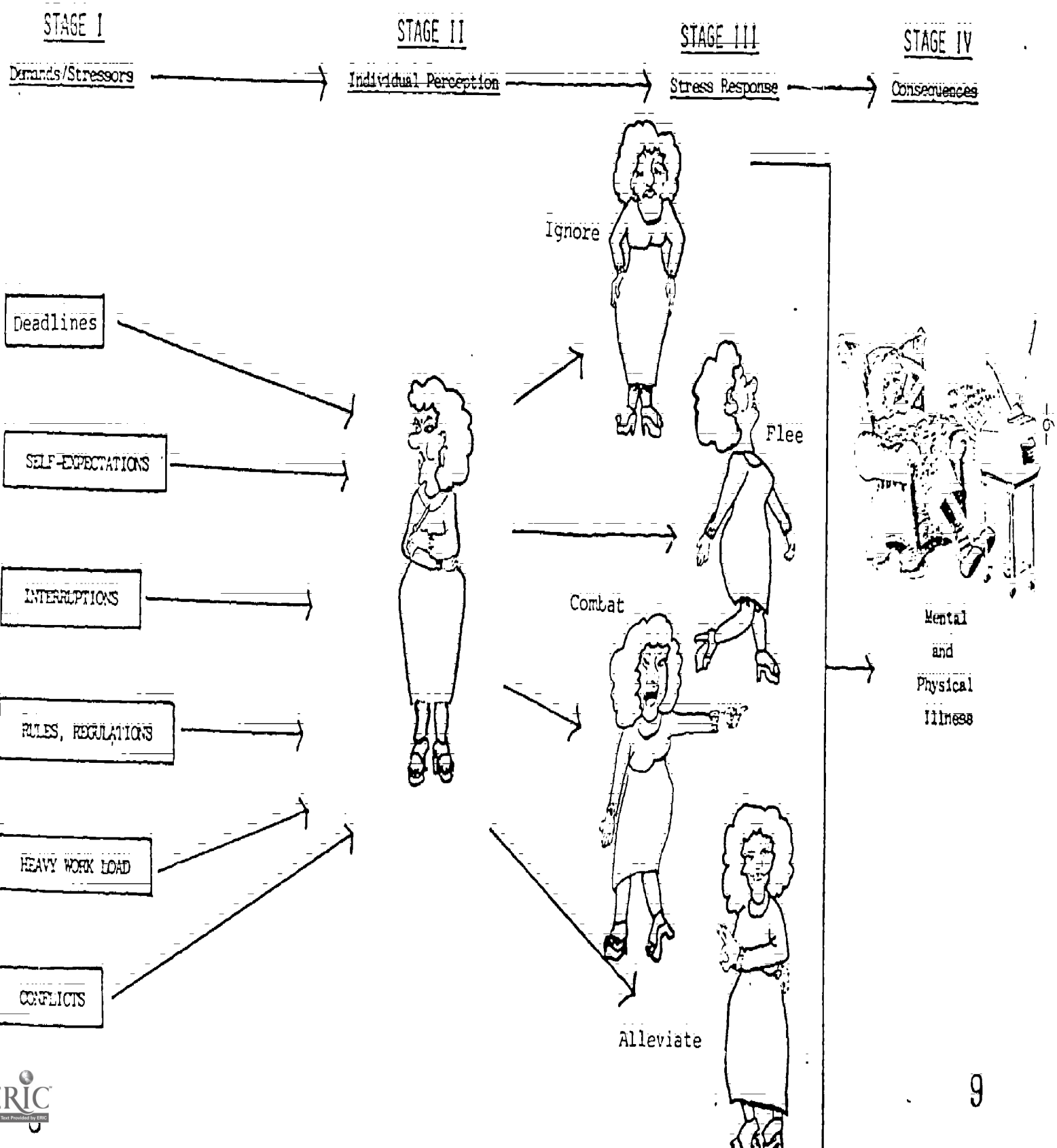
(6) To develop a descriptive rather than prescriptive strategy for individually building a well-rounded, holistic coping profile.

Theoretical Framework

Stress is a complicated phenomenon, subject to a range of definitions. For the purposes of this study, stress is taken to reflect a four-stage cycle (Figure 1). This process begins with a set of specific demands. Whether a particular demand produces stress depends on stage two--the individual's perception of the demand. If the individual does not have the physical and/or mental resources to meet the demand he or she perceives that demand as a stressor. The stress created by this discrepancy between demand and personal resources results in a stress or coping response (stage three) taking the form of psychological, phsiological, or behavioral reactions. The fourth and final stage, termed consequences, pertains to the intensity and long-range effects of stress (Gmelch, 1982).

Figure 1 about here

THE STRESS CYCLE



The plethora of stress research has primarily addressed the first, second, and fourth stages of the stress cycle. For example, the sources of stress, stage one, have been documented for students (Thoreson and Eagleston, 1983), teachers (Cichon and Koff, 1980, Schwab and Iwaniki, 1982), and administrators (Gmelch and Swent, 1982). Numerous studies have also reflected on stage two, the perception of stress in terms of Type A behavior (Friedman, 1974), the workaholic behavior (Machlowitz, 1980), and the migrane, ulcer, cancer, and arthritic personalities (Morse and Furst, 1979). The final stage of consequences has been well documented by the National Institute of Mental Health, the American Heart Association, and the American Medical Association. However, the research pertaining to stage three, coping response, has, at times, suffered from fragmentation and fadism without coherent subject-centered research on individual and holistic coping strategies. It is within this stage that this study was conducted with the intent of describing, rather than prescribing, the techniques and styles often used by educators in meeting the pressures and tensions of their jobs.

Method and Results

This study was conducted in two phases. In the first phase, data was gathered on specific coping techniques and analyzed for possible clusters of coping categories. This phase fulfilled the first two study objectives while the second phase actually assessed the number of techniques or responses educators currently used and the frequencies of their uses.

The first data set for the study was obtained in connection with a larger study of stress among public school educators in the state of Oregon (Gmelch & Swent, 1982). Every person within this population was sent a questionnaire together with a letter explaining the purpose of the study and a return envelope. Respondents were asked: "Recognizing that your occupation

is a demanding one, what ways have you personally found useful in handling the tensions and pressures of your job?" Of the 1,855 mailed questionnaires, 1,207 were returned. Of these, 1,156 usable surveys were obtained for a net response rate of 62.3%.

In conducting the content analysis of the responses, it should be noted that the majority of respondents cited more than one coping technique. In all, approximately 2,356 coping responses were analyzed. This number was reduced based on one or more considerations: (1) those judged to be more or less synonymous with another (e.g., jogging and running); (2) those overlapping others (e.g., religion and salvation); and (3) those too specific to constitute a separate technique (e.g., baseball, soccer, basketball were combined into "team sports"). Content analysis procedures were used by two separate raters to categorize the techniques into separate and distinct coping categories. As Berelson (1952) described, content analysis is a "research technique for the objective, systematic, and quantitative description of the manifest content of communication (p. 18)." The purpose in this study was to classify and quantify unstructured coping responses to make it more meaningful and more easily understood.

Once the content analysis was completed, a group of 25 educators were then selected to field test the results. They were asked to review the coping techniques for completeness and coping categories for appropriateness. After adjustments were made the following categories and techniques emerged.

Table 1 about here

The first category, containing 16 coping techniques, centered around social support activities such as having lunch with family or friends, playing with kids, playing cards and games, and talking with spouse, peer, or friends. The second category, consisting of 28 items, contained physical activities

Table 1

Coping Categories and
Number of Responses

Coping Category	Number of Responses	Typical Responses
Social	16	having lunch playing cards talking with friend
Physical	28	boating, sailing fishing, camping team sports
Intellectual	12	studying going to conference cultural events
Entertainment	20	watching TV eating out going to movies
Personal	16	playing music gardening hobbies
Managerial	32	delegating prioritizing planning
Attitudinal	32	optimism crying, laughing acceptance
TOTAL	156	

including boating, shooting baskets, playing team sports, meditating, running walking, and so on. The third category reflected intellectual stimulation and contained 12 items including such activities as attending professional conferences, studying, and attending cultural events. Entertainment encompasses the fifth category and represented 20 items including watching television, going to a movie, taking a vacation, free reading, and so on. The fifth category consisted of 16 personal-interest techniques such as playing a musical instrument, training animals, collecting coins and stamps, and working on crafts. A proliferation of self-management techniques (32) represented the sixth category including delegating, saying no, training staff, setting goals, prioritizing work, and praising a job well done. Finally, thirty-two coping techniques fell into the category of attitudes. Respondents cited such attitudinal techniques as laughing, crying, being optimistic, and knowing limitations. In all, 156 coping techniques were grouped within the seven coping categories.

The second phase of the study sought to assess the number of coping responses used and the frequency with which respondents used them. One hundred and twenty-five educators were asked to indicate how often, if at all, they used the 156 techniques. They were provided response codes as follows: 0 = never; 1 = once a year or less; 2 = four times a year or less; 3 = monthly; 4 = weekly; and 5 = daily.

The results of the mean scores and standard deviations of the numbers and frequencies of coping responses used are displayed in Table 2. Of the total possible coping techniques in each category, respondents utilized almost all--except in the physical and personal categories. While this result would seem logical, what may be of more importance were the frequencies with which the respondents used the techniques. The managerial, attitudinal, and social categories were used most frequently, followed by intellectual, physical, per-

sonal, and entertainment.

Table 2 about here

The data were also analyzed by the respondent's sex, age, and position. Inferential statistics could not be used to analyze the data since the respondents represented a population.

With respect to gender differences, the greatest difference in the number of responses used was in the physical category (2.67 higher for men), which was negligible considering a standard deviation of 4.26.

Table 3 about here

In Table 4a, the numbers of coping responses used by different age groups did not reveal any practical significant difference, although slight increases in the number of responses used (as age increased) were detected in the social, intellectual, and entertainment categories. Also, the physical category showed a slight decline as age of the respondent increased.

Table 4a about here

When the frequencies of coping responses were analyzed by age groupings, a slight decrease in the use of physical activities and entertainment was detected as age of the respondent increased. Other frequencies remained fairly stable over differences in respondent ages.

Table 4b about here

Finally, coping responses and frequencies were analyzed by position. As shown in Tables 5a and 5b, no practical significant differences were detected in the number of responses used as well as the frequency of responses by teachers, principals, or central office administrators.

Tables 5a & 5b about here

Table 2

Mean Scores and Standard Deviations of Numbers and Frequencies of Coping Responses Used

ping Category	Number of Possible Responses	Number of Responses Used		Frequency of Responses Used	
		Mean Score	S. D.	Mean Score	S. D.
Social	16	15.15	1.27	3.28	.43
Physical	28	16.80	5.04	2.74	.53
Intellectual	12	10.85	1.77	2.76	.51
Entertainment	20	17.98	2.15	2.53	.41
Personal	16	8.80	2.85	2.66	.58
Managerial	32	30.03	3.27	3.60	.44
Attitudinal	32	31.17	1.35	3.46	.51
TOTAL	156	130.39	10.98	3.11	.29

Table 3

Mean Scores and Standard Deviations of Numbers and Frequencies of Coping Responses Used by Sex

Coping Category	Number of Responses Used				Frequency of Responses Used			
	Male		Female		Male		Female	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Social	15.15	1.29	14.95	1.41	3.28	.47	3.24	.35
Physical	17.71	5.06	15.04	4.26	2.72	.54	2.77	.48
Intellectual	10.94	1.90	10.40	1.71	2.81	.54	2.74	.44
Entertainment	17.92	2.10	17.95	2.27	2.56	.41	2.42	.40
Personal	8.32	2.83	9.62	2.58	2.68	.64	2.61	.49
Managerial	30.68	2.26	29.10	4.31	3.57	.48	3.68	.39
Attitudinal	31.03	1.49	31.21	1.07	3.44	.53	3.51	.48
TOTAL	131.06	10.85	127.73	11.67	3.11	.31	3.10	.25

Table 4a

Mean Scores and Standard Deviations of Numbers of Coping Responses Used by Age

ng Category	Number of Coping Responses Used											
	21-25		26-30		31-35		36-40		41-45		46-53	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
cial	14.53	1.55	14.70	1.33	14.88	1.58	15.44	1.16	15.43	.76	16.00	.00
ysical	17.06	4.85	17.65	4.61	16.61	5.68	17.28	5.24	15.51	4.33	14.33	2.78
tellectual	9.47	2.00	10.00	1.83	11.04	1.56	11.41	1.88	11.00	1.47	11.22	1.39
tertainment	17.18	2.32	17.65	2.06	17.77	2.53	18.03	2.01	18.71	1.77	19.22	.97
rsonal	8.94	3.07	8.43	2.06	9.62	2.74	8.31	3.27	9.36	2.65	7.78	2.22
nagerial	29.07	5.23	30.73	1.88	30.03	2.97	30.28	2.94	29.36	3.69	30.22	4.24
titudinal	30.88	1.22	30.57	1.12	31.54	.90	31.31	1.35	30.71	2.30	31.44	.88
TAL	125.38	14.78	128.43	10.57	131.58	10.47	131.33	12.03	130.29	9.64	130.22	4.94

Table 4b
Mean Scores and Standard Deviations of Frequencies
of Coping Responses Used by Age

Category	Frequency of Coping Responses Used											
	21-25		26-30		31-35		36-40		41-45		46-53	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
	3.24	.39	3.29	.44	3.26	.38	3.21	.39	3.31	.37	3.38	.71
l	2.86	.59	2.79	.54	2.73	.47	2.65	.45	2.72	.60	2.68	.60
ctual	2.79	.53	2.92	.48	2.81	.43	2.62	.55	2.85	.58	2.80	.48
inment	2.62	.54	2.52	.36	2.61	.37	2.40	.40	2.51	.38	3.37	.40
i	2.67	.49	2.67	.37	2.58	.61	2.66	.68	2.76	.58	2.71	.62
ial	3.73	.52	3.77	.44	3.50	.37	3.50	.40	3.57	.51	3.84	.47
inal	3.50	.58	3.40	.46	3.47	.39	3.30	.64	3.69	.47	3.70	.35
	3.09	.35	3.14	.25	3.07	.24	3.03	.30	3.17	.31	3.24	.29

Table 5a

Mean Scores and Standard Deviations of Numbers of Coping Responses Used by Position

Category	Number of Coping Responses Used					
	Teacher		Principal		Central Office	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
	15.07	1.18	15.32	1.25	14.95	1.56
l	16.96	4.77	17.42	4.88	16.77	6.27
ctual	10.62	1.65	11.35	2.04	11.00	1.48
inment	17.69	2.29	18.35	2.09	18.05	1.50
l	8.86	2.97	8.48	2.95	8.59	2.50
ial	29.58	2.55	30.77	2.63	31.50	.60
inal	31.21	1.07	30.84	1.90	31.45	.91
	129.14	11.42	132.00	11.89	132.04	7.98

Table 5b

Mean Scores and Standard Deviations of Frequency of Coping Responses Used by Position

Category	Frequency of Coping Responses Used					
	Teacher		Principal		Central Office	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
	3.22	.43	3.38	.44	3.23	.49
ai	2.81	.51	2.67	.54	2.79	.49
ectual	2.77	.43	2.69	.61	2.88	.53
ainment	2.58	.44	2.46	.34	2.53	.27
al	2.73	.54	2.66	.62	2.64	.59
rial	3.54	.48	3.64	.44	3.60	.36
dinal	3.42	.42	3.51	.68	3.42	.35
	3.10	.31	3.11	.29	3.15	.24

Discussion and Conclusions

The first part of this study sought to find specific coping techniques helpful to educators and cluster them into interpretable categories. One hundred and fifty-six techniques were identified and were found to cluster into seven categories. These categories are consistent with the coping literature, but now provide the distinct advantage of representing an integrated, holistic coping concept.

While previous treatment of coping material has either provided effective single techniques or conceptualized frameworks often lacking practical use, the results of this study suggest a possible coping taxonomy from which educators could seek stress reduction through a balance of techniques among all seven categories. Much like weight loss, coping with stress is a holistic and polytechnic proposition. If one were to exercise more, but eat more too, the results may not be as beneficial as exercising more while cutting back or stabilizing one's diet. In much the same way, effective coping consists of building a repetoire of techniques equally balanced in the social, physical, intellectual, entertainment, managerial, personal, and attitudinal categories.

Currently the Stress Response Inventory which emerged from this study is being used for individual self-assessment for stress reduction. While the statistics on the number of responses and mean frequencies on coping responses did not yield practical significant differences, they do provide diagnostic guidelines for individual assessment for developing healthy coping profiles (Gmelch, 1982). While it has been argued that coping is an art, individuals need to understand and use mediums of art such that all their creative talents and resources will continually be challenged. The seven categories identified in this study suggest a holistic strategy for the challenge of healthy living.

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